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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,098	02/12/2002	Patrick H. Stanley	56291.000018	3691

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EXAMINER

DUONG, DUC T

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/073,098	Applicant(s) STANLEY ET AL	
	Examiner Duc T. Duong	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38,40-59 and 61-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40-59 and 61-66 is/are allowed.
- 6) ☒ Claim(s) 1-10,12-21,23,24,27,28,33 and 34 is/are rejected.
- 7) ☒ Claim(s) 11,22,25,26,29-32 and 35-38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-38, 40-59, and 61-66 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-7, 12-18, 23, 24, 27, 28, 33, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones et al (US Patent 6,904,082 B2).

Regarding to claims 1 and 12, Jones discloses a method for communicating information packets between at least a first modem and a second modem via a communication line (col. 10 lines 1-4), the method comprising the steps of setting a fixed lower corner frequency (FSstart) to enable communications to occur on a portion a

Art Unit: 2616

communication spectrum not used by another coexisting application to enable line sharing functionality (fig. 4 col. 10 lines 4-6); determining a center frequency based on the fixed lower corner frequency and a baud rate (col. 11 lines 12-21); and operating a signal in a lower end of the communication spectrum wherein signal loss and crosstalk are reduced (col. 11 lines 22-44).

Regarding to claims 2 and 13, Jones discloses the coexisting application includes at least one of analog voice band, integrated services digital network, Centrex, and digital private branch exchange (col. 1 lines 17-26).

Regarding to claims 3 and 14, Jones discloses detecting a symbol rate change and adjusting a frequency band for communication in response to the symbol rate change (col. 11 lines 58-60).

Regarding to claims 4 and 15, Jones discloses the baud rate ranges from approximately 62.5 kHz to 13.333 MHz (col. 18 lines 19-22).

Regarding to claims 5 and 16, Jones discloses implementing a QAM 256 modulation scheme for increasing data rate (fig. 2 col. 6 lines 1-7).

Regarding to claims 6 and 17, Jones discloses implementing a decision feedback equalizer for improved filtering (fig. 2 col. 7 lines 3-4).

Regarding to claims 7 and 18, Jones discloses providing forward error correction for recovering corrupted data (fig. 2 col. 5 lines 63-64).

Regarding to claim 23, Jones discloses a transmitter (fig. 2) for communicating information packets via a communication line 23, the transmitter comprising an encoder 12 for encoding a digital data stream into a waveform (col. 5 lines 63-67); and a

Art Unit: 2616

transmitting means 21 for transmitting the waveform comprising information packets via a two-wire line (col. 6 lines 18-34), wherein the two-wire line is a telephone subscriber line; wherein the transmitter operates at a fixed lower corner frequency to enable communications to occur on a portion of a communication spectrum not used by another coexisting application to enable line sharing functionality wherein signal loss and crosstalk are reduced (col. 11 lines 22-44).

Regarding to claim 24, Jones discloses the coexisting application includes at least one of analog voice band, integrated services digital network, Centrex, and digital private branch exchange (col. 1 lines 17-26).

Regarding to claim 27, Jones discloses a FEC encoder 12 for adding coding gain by adding a plurality of bits for error correction (fig. 2 col. 5 lines 63-67 and col. 6 lines 1-7).

Regarding to claim 28, Jones discloses a QAM data encoder 12 for performing a differential phase encoding (fig. 2 col. 5 lines 63-67 and col. 6 lines 1-7).

Regarding to claim 33, Jones discloses a receiver (fig. 2) for receiving information packets via a communication line 23, the receiver comprising a decoding 37 means for decoding a sampled analog signal into a series of symbols (col. 7 lines 5-7); and a receiving means 21 for receiving the sampled analog signal via a two-wire line, wherein the two-wire line is a telephone subscriber line (col. 6 lines 18-34); wherein the receiver operates at a fixed lower corner frequency to enable communications to occur on a portion of a communication spectrum not used by another coexisting application to

Art Unit: 2616

enable line sharing functionality wherein signal loss and crosstalk are reduced (col. 11 lines 22-44).

Regarding to claim 34, Jones discloses the coexisting application includes at least one of analog voice band, integrated services digital network, Centrex, and digital private branch exchange (col. 1 lines 17-26).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-10 and 19-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Jones.

Regarding to claims 8, 9, and 19-21, Jones fails to teach the communication is delivered at various rates and distances. However, to arrange for communication to be delivered at various rates and distances would have been obvious to a person of ordinary skill in the art since such arrangement is well known in the art and can be implemented using different type of modulation schemes and medium.

Allowable Subject Matter

6. Claims 11, 22, 25, 26, 29-32, and 35-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 40-59 and 61-66 allowed.

Art Unit: 2616

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD
DD



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SUPERVISORY PATENT EXAMINER
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